TITLE 8 DEVELOPMENT CODE
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CHAPTER 2: HAZARD PROTECTION.
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Article 1: AIRPORT SAFETY (AR) OVERLAY DISTRICT

85.020101 Intent.

The Airport Safety Overlay District is created to provide greater safety to aviators and the general public by establishing requirements for land use compatibility reviews within designated areas that are in close proximity to a public use airport or heliport.

Readopted Ordinance 3341 (1989); Amended Ordinance 3572 (1993); Amended Ordinance 3658 (1996)

85.020105 Locational Requirements.

Airport Safety Overlay District boundaries are designated on the San Bernardino County Official Land Use Plan by the symbols AR1, AR2, AR3, and AR4 and are designated in the following areas:

(a) The area within an adopted Airport Comprehensive Land Use Plan for public use airports within the County.

(b) The unincorporated areas of adopted Airport Comprehensive Land Use Plans for those public use airports within incorporated cities.

(c) The area within a low altitude/high speed corridor designated for military aircraft operations.

Readopted Ordinance 3341 (1989); Amended Ordinance 3544 (1993); Amended Ordinance 3572 (1993); Amended Ordinance 3658 (1996)

85.020108 Airport Safety Review Areas.

Airport Safety Review Areas are categorized as follows:

(a) Airport Safety Review Area 1 (AR1): Those areas at either end of a runway, outside the airport boundaries, that corresponds with the FAA Runway Protection Zone (per FAR Part 152) for each runway end. Also, it is any area identified by the Interim Airport Land Use Plan as a crash hazard zone or as a touchdown pad and peripheral area for a heliport.

(b) Airport Safety Review Area 2 (AR2): Those areas within the adopted 65 CNEL (Community Noise Equivalency Level) or Ldn (Day-Night Average Sound Level) noise contours.

(c) Airport Safety Review Area 3 (AR3) is one of the following areas:

(1) The area within one (1) mile outside the 65 Ldn noise contour, for those public use airports with adopted noise contours. In such areas, Airport Safety Review Area 3 shall encompass the boundaries prescribed in Federal Aviation Regulations Part 77 which depicts imaginary surfaces for "objects affecting navigable airspace," as applicable to the specific FAA approved Airport Layout and Approach Plan. The imaginary surfaces are:

(A) Approach Surface - Extending outward and upward from the end of the primary runway surface along a slope of 20 to 1 (20:1) and extending for a horizontal distance of five thousand (5,000) feet. (Slope and distances increase depending on precise approach existing or planned for the particular runway.)

(B) Horizontal Surface - A horizontal plane one hundred fifty (150) feet above the established airport elevation. The perimeter is constructed by swinging arcs of five thousand (5,000) feet, [ten thousand (10,000) feet for runways other than utility or visual] radii from the center of each of the primary runway surfaces (i.e., beginning points of Safety Review Area I) and connecting the adjacent arcs by lines tangent to those arcs.

(C) Conical Surface - a surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 (20:1) for a horizontal distance of four thousand (4,000) feet. (Distances increase for military airports.)

(2) The area within one mile of the outer boundaries of the airport ownership, for those public use airports without adopted noise contours (e.g. 65 Ldn).

(3) The area outside the 65 Ldn noise contour for a heliport but within one half (1/2) mile of such line.

(d) Airport Safety Review Area 4 (AR4) applies to low-altitude/high speed corridors designated for military aircraft use.

Adopted Ordinance 3658 (1996)

85.020110 Airport Comprehensive Land Use Plans.

(a) Airport Comprehensive Land Use Plans have been established by the County for the following airports:

(1) Baker
(2) Barstow - Daggett
(3) Big Bear City
(4) Hi-Desert
(5) Sun Hill Ranch
(6) Twentynine Palms
(7) Yucca Valley.

(b) Airport Comprehensive Land Use Plans that have been established by other jurisdictions but have impact on unincorporated areas of the County and have been recognized by the County Board of Supervisors by resolution are as follows:

(1) Apple Valley
(2) Cable
(3) Chino
(4) Hesperia
(5) Needles
(6) Ontario
(7) Redlands
(8) Rialto
(9) San Bernardino International
(10) Southern California International

Readopted Ordinance 3341 (1989); Amended Ordinance 3544 (1993); Amended Ordinance 3572 (1993); Amended Ordinance 3658 (1996)

85.020115 Review Procedures.

(a) All land use applications within any Airport Safety Review Area shall be consistent with the adopted General Plan and subject to the findings, development standards and review procedures specified by this section. This includes all proposed expansions, revisions or establishments of airport or heliport facilities.

(b) Land use applications in any Airport Safety Review Area shall be subject to the review criteria of this section.

(c) Public Hearings: In addition to the normal reasons for a public hearing, a public hearing review is also required when the proposed use is inconsistent with the Land Use Compatibility criteria of the applicable adopted Airport Comprehensive Land Use Plan.

(d) Proposed airport and heliport facilities are subject to the development standards and criteria set forth in Section 85.020120. Additionally, the plan for construction shall be approved by the Board of Supervisors in the form of a minute order or resolution, in accordance with Public Utilities Code Section 21661.5, and a copy of the minute order or resolution shall be provided to the State Department of Transportation.

(e) Any requirements resulting from the Airport Safety Review shall be incorporated into the project design and conditions of approval.

Readopted Ordinance 3341 (1989); Amended Ordinance 3572 (1993); Amended Ordinance 3658 (1996)

85.020120 Development Standards and Criteria.

When any development or land use is proposed within an Airport Safety Overlay District or an Airport Safety Review Area the following standards and criteria shall apply in addition to any standards required by the applicable Airport Comprehensive Land Use Plan:

(a) Proposed structures and the normal mature height of any vegetation shall not exceed the height limitations established in Federal Aviation Regulations (FAR) Part 77 unless Form 7460-1, Notice of Proposed Construction or Alteration, has been filed with and approved by the FAA, prior to the issuance of building permits. All mitigative measures recommended by the FAA shall be incorporated into the project conditions of approval. (Existing topographic elevations, as compared to the elevation of the centerline of the runway, shall be considered in determining the permitted height of an affected structure.)

For heliports: Structures and the normal mature height of any vegetation adjacent to the helipad shall not exceed the height limitations provided by the requirements of Federal Aviation Regulations (FAR) Part 77 for heliports.

(b) Proposed uses shall be consistent with the County General Plan, any applicable, adopted Airport Land Use Plan, and this Section.

(c) The proposed use or structure shall not reflect glare, emit electronic interference, produce smoke, or store or dispense hazardous materials in such a manner that would endanger aircraft operations or public safety in the event of an aircraft accident.

For heliports: Uses or structures adjacent to the helipad shall not reflect glare, emit electronic interference, produce smoke, or store or dispense hazardous materials in such a manner that would endanger aircraft operations or public safety in the event of an aircraft accident.

(d) All airports and heliports shall be constructed pursuant to Federal Aviation Administration (FAA) requirements and subject to the requirements of applicable state law.

(e) No permanent structures or uses shall be allowed within Airport Safety Review Area 1.

(f) Noise level reduction shall be designed and constructed in all structures to maintain maximum interior noise level of 45 dba for residential uses, and 55 dba for commercial and industrial uses.

(g) An Avigation and Noise Easement shall be granted to the appropriate airport and recorded prior to the issuance of building permits. A copy of the easement shall be forwarded to the County and the affected airport.

(h) The property owner shall provide to any renters, lessees or buyers information that the site is subject to aircraft overflight from the appropriate airport, is subject to the potential noise problems associated with aircraft operations, and is subject to an Avigation and Noise Easement. Said information shall be provided prior to the completion of the rental, lease or sale. Said information shall be incorporated into the CC & R's recorded with the property and in all lease and rental agreements.

Readopted Ordinance 3341 (1989); Amended Ordinance 3544 (1993); Amended Ordinance 3572 (1993); Amended Ordinance 3658 (1996)

Article 2: FIRE SAFETY (FS) OVERLAY DISTRICT

85.020201 Intent.

The Fire Safety Overlay District is created to provide greater public safety in areas prone to wildland brush fires, by establishing additional development standards for these areas.

Readopted Ordinance 3341 (1989), Amended Ordinance 3918 (2004),

85.020205 Locational Requirements.

The Fire Safety Overlay District shall be designated in high fire hazard areas as mapped on the County General Plan Hazards Maps with the locations derived from the California Department of Forestry and U.S. Forest Service and the County Fire Department.

Readopted Ordinance 3341 (1989), Amended Ordinance 3918 (2004),

85.020210 General Provisions.

(a) The provisions of this section shall apply to all phases of a development project.

(b) A notice of all land use applications and/or development permits that would lead to the construction of structures or the subdivision of land within the Fire Safety Overlay District shall be filed with the responsible fire authority by the Land Use Services Department.

(c) All proposed land use applications that would lead to the construction or expansion of a structure or the subdivision of land shall be submitted to the responsible fire authority and the appropriate Natural Resource Conservation Service office for review and recommendation. Any recommendations received shall be indicated in any staff report and/or presentation for the proposed development and shall be incorporated into the conditions of approval where possible.

(d) All proposed development must meet all other applicable standards set forth by the responsible fire authority.

(e) Any addition, alteration, enlargement or reconstruction of a structure must comply with the provisions of this Article. When an addition, alteration, enlargement or reconstruction of a structure equals or exceeds fifty percent (50%) of the existing structure, or twenty-five percent (25%) of the roof for the roofing requirements only, the provisions of this Article regarding construction requirements shall apply to the entire structure and/or the whole roof as applicable. Such structures and/or roofs shall be entirely retrofitted to comply with the provisions of this Article.

(f) General Standards. The following standards shall apply to all development within the Fire Safety Overlay District.

(1) Firewood Storage: All areas used for the storage of firewood, or other flammable materials shall either be at least thirty (30) feet away from all structures, or wholly enclosed within a structure.

(2) Fences:

(A) Where wood or vinyl fencing is used , there shall be a minimum of five foot separation between the wood or vinyl fencing and the wall of the nearest structure except on those properties where previous construction occurred pursuant to a previous code. Fencing within the five foot separation area shall be of noncombustible material or modified one-hour fire-resistance-rated construction.

(B) All fences or walls required adjacent to fuel modification areas or wildland areas as conditions of approval for a development project shall be constructed of noncombustible materials as defined in the California Building Code. All other fences, including those on the interior of such development project, are not subject to this requirement, except as required in subsection (A) above.

Readopted Ordinance 3341 (1989); Amended Ordinance 3384 (1990), Amended Ordinance 3918 (2004),

85.020215 Fire Safety Areas.

The Fire Safety Overlay District is divided into three fire safety areas to correspond to district geographic areas and the associated wildland fire hazard. A different set of requirements is applied in each fire safety area.

(a) Fire Safety Area 1 (FS1). Fire Safety Area 1 includes those areas within the mountains and valley foothills. It includes all the land generally within the National Forest boundary and is characterized by areas with moderate and steep terrain and moderate to heavy fuel loading contributing to high fire hazard conditions.

(b) Fire Safety Area 2 (FS2). Fire Safety Area 2 includes those lands just to the north and east of the mountain FS1 area in the mountain-desert interface. These areas have gentle to moderate sloping terrain and contain light to moderate fuel loading. These areas are periodically subject to high wind conditions which have the potential of dramatically spreading wildland fires.

(c) Fire Safety Area 3 (FS3). Fire Safety Area 3 includes lands just to the south of the mountain FS1 area. These lands are primarily within the wildland-urban interface of the Valley Region and consist of varying terrain from relatively flat to steeply sloping hillside areas. Present and future development within FS3 is exposed to the impacts of wildland fires and other natural hazards primarily due to its proximity to FS1. These areas are subject to Santa Ana wind conditions which have the potential of dramatically spreading wildland fires during extreme fire behavior conditions.

Readopted Ordinance 3341 (1989), Amended Ordinance 3918 (2004),

85.020220 Building Standards for FS1.

(a) Roof covering: Roof coverings shall be either noncombustible or shall be fire retardant material not composed of organic fiber with a minimum Class A rating, as defined in the California Building Code. The tile shall be tight-fitting and the open ends of high-profile tile shall be capped with non-ignitable material to prevent birds' nests or other combustible material from accumulating. Gutters and downspouts shall be constructed of noncombustible material.

(b) Exterior walls and building separation for residential uses: Exterior wall separation standards are designed to reduce the exposure and risk from adjacent structural fires and to reduce the potential spread of fire from structure to structure. A minimum thirty (30) foot building separation is required.

(1) All residential structures shall have interior side yard setbacks of twenty percent (20%) of the lot width. Interior side yards shall not be less than five (5) feet and need not exceed fifteen (15) feet. Under no circumstances shall any projection into the interior side yard be closer than five feet from the property line. Wherever possible, exterior wall separations shall not be less than ten (10) feet for all buildings, including those on adjoining parcels.

(2) When exterior walls of residential and accessory buildings or portions thereof are within fifteen (15) feet of interior side or rear lot lines, or the exterior wall separation is less than thirty (30) feet, the outside of all such exterior walls or portions thereof shall be constructed with the modified one-hour construction. Modified one-hour construction shall be defined by the Building Official. Where building separations are less than ten (10) feet, additional mitigation measures may be required by the responsible fire authority.

(c) Eaves: Eaves shall be solidly filled with tight-fitting wood blocks at least one and one-half (1 1/2) inches thick.

(d) Exterior glazing: Exterior glazing shall comply with the provisions of the California Building Code and with the following additional requirements:

(1) Exterior windows, window walls and glazed doors, and windows within exterior doors, shall be multi-layered glass panels (dual- or triple-paned), tempered glass, or other assemblies approved by the Building Official.

(2) Vinyl window frame assemblies shall be prohibited, except when they have all of the following characteristics:

(A) Frame and sash are comprised of vinyl material with welded corners;

(B) Metal reinforcement in the interlock area;

(C) Glazed with insulated glass or tempered;

(D) Frame and sash profiles are certified in American Architectural Manufacturing Association (AAMA) Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory); and

(E) Certified and labeled in accordance with American National Standards Institute (ANSI)/AAMA/National Wood Window and Door Association (NWWDA) structural requirements.

(e) Exterior Doors: All exterior doors made of wood or wood portions shall be solid core wood. For exterior doors with inset windows, refer to Subsection 85.0220(d)(1) above.

(f) Address Numbers: All new and existing non-accessory buildings shall have internally illuminated, noncombustible building address numbers legible from the street in accordance with the provisions of the Uniform Fire Code as adopted by the County or the authority having jurisdiction.

(g) Structure openings: Louvers, ventilators, or openings in walls, roofs, attics, and underfloor areas having headroom less than four (4) feet in height which are not fitted with sash or doors, shall be covered with wire screen. The screen covering such openings shall be of corrosion-resistant metal or other approved material that offers equivalent protection and shall have a maximum mesh of one-eighth (1/8) inch. Eave-type attic ventilators and roof-mounted turbine vents are prohibited.

(h) Insulation: Paper-faced insulation shall be allowed in attics or ventilated spaces only if the paper is not exposed to the attic open space. Cellulose insulation is required to be fire retardant.

(i) Setback from National Forest Boundary: All buildings on lots which abut a National Forest that were created after March 9, 1988 shall be set back at least thirty (30) feet from the boundary of the San Bernardino National Forest.

(j) Chimneys: Every chimney used in conjunction with any fireplace or any heating appliance in which solid or liquid fuel is used, shall be maintained with a spark arrester. An approved spark arrester shall mean a device constructed of stainless steel, copper or brass, woven galvanized wire mesh, twelve (12) gauge minimum of three-eighths (3/8) inch minimum to one-half (1/2) inch maximum openings, mounted in or over all outside flue openings in a vertical and near vertical position, adequately supported to prevent movement and visible from the ground.

(k) Fire hydrants: Fire hydrants shall be identified by a method specified by the Fire Authority.

(l) Fuel tanks: Fuel tanks (e.g., liquefied petroleum tanks) shall be located at least ten (10) feet away from any structure and in accordance with the Uniform Fire Code, the Table of Projections and the Storage Standards specified by Fire Hazard Performance Standards in Chapters 5 and 9 in Division 7 of this Title. Such tanks shall be secured to the ground.

(m) Water faucets: A minimum of two (2) three quarter (3/4) inch faucets with hose connections each served by a three quarter (3/4) inch waterline and installed prior to any pressure reducing device shall be available per habitable structure separated by at least one-third (1/3) of the perimeter of the structure. Such faucets should be on the side(s) of a structure facing fire hazardous areas whenever possible.

(n) Decks: Cantilevered or standard type decks shall be constructed with: 1) a minimum of at least one and one-half (1 1/2) inch wood decking; and/or 2) protected on the underside with materials approved for one (1) hour fire resistive construction; and/or 3) be of noncombustible materials, as defined in the California Building Code.

(o) Patio covers: Patio covers attached or within ten (10) feet of a residential structure with plastic, bamboo, straw or fiberglass or wood lathe lattice made of materials which are one half (1/2) inch or less in width shall be prohibited.

(p) Piping: Exposed piping, except for plumbing vents above the roof, shall be noncombustible as defined in the California Building Code.

(q) Unenclosed or projecting assemblies: Unenclosed or projecting assemblies, such as cantilevered floors, bay windows, etc., which contain concealed space shall be protected on the exposed side with materials approved for the modified one-hour construction.

(r) Additional requirements: Dependent upon specific conditions of the site, such as fire flow, building separation, road conditions, slope, vegetation, etc., or combination thereof, the responsible fire authority may require any structures to meet more stringent construction standards as additional mitigation to the fire threat. Such standards include, but are not limited to, full perimeter exterior walls to be constructed to the modified or full one-hour construction standards, sprinklers, soffitted eaves, etc.

Readopted Ordinance 3341 (1989); Amended Ordinance 3374 (1990); Amended Ordinance 3427 (1990), Amended Ordinance 3918 (2004).

85.020225 Building Standards for FS2.

(a) Roof covering: Roof coverings shall be either noncombustible or shall be fire retardant material not composed of organic fiber with a minimum Class A rating, as defined in the California Building Code. The tile shall be tight-fitting and the open ends of high-profile tile shall be capped with non-ignitable material to prevent birds' nests or other combustible material from accumulating. Gutters and downspouts shall be constructed of noncombustible material.

(b) Exterior walls and building separation for residential uses: Exterior wall separation standards are designed to reduce the exposure and risk from adjacent structural fires and to reduce the potential spread of fire from structure to structure. A minimum thirty (30) foot building separation is required.

(1) All residential structures shall have interior side yard setbacks of twenty percent (20%) of the lot width. Interior side yards shall not be less than five (5) feet and need not exceed fifteen (15) feet. Under no circumstances shall any projection into the interior side yard be closer than five feet from the property line. Wherever possible, exterior wall separations shall not be less than ten (10) feet for all buildings, including those on adjoining parcels.

(2) When exterior walls of residential and accessory buildings or portions thereof are within fifteen (15) feet of interior side or rear lot lines, or the exterior wall separation is less than thirty (30) feet, the outside of all such exterior walls or portions thereof shall be constructed with the modified one-hour construction. Modified one-hour construction shall be defined by the Building Official. Where building separations are less than ten (10) feet, additional mitigation measures may be required by the responsible fire authority.

(c) Eaves: Eaves shall be solidly filled with tight-fitting wood blocks at least one and one-half (1 1/2) inches thick.

(d) Exterior glazing: Exterior glazing shall comply with the provisions of the California Building Code and with the following additional requirements:

(1) Exterior windows, window walls and glazed doors, and windows within exterior doors, shall be multi-layered glass panels (dual- or triple-paned), tempered glass, or other assemblies approved by the Building Official.

(2) Vinyl window frame assemblies shall be prohibited, except when they have all of the following characteristics:

(A) Frame and sash are comprised of vinyl material with welded corners;

(B) Metal reinforcement in the interlock area;

(C) Glazed with insulated glass or tempered;

(D) Frame and sash profiles are certified in AAMA Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory); and

(E) Certified and labeled in accordance with American National Standards Institute (ANSI)/AAMA/National Wood Window and Door Association (NWWDA) structural requirements.

(e) Exterior Doors: All exterior doors made of wood or wood portions shall be solid core wood. For exterior doors with inset windows, refer to Subsection 85.0220(d)(1) above.

(f) Address Numbers: All new and existing non-accessory buildings shall have internally illuminated, noncombustible building address numbers legible from the street in accordance with the provisions of the Uniform Fire Code as adopted by the County or the authority having jurisdiction.

(g) Structure openings: Louvers, ventilators, or openings in walls, roofs, attics, and underfloor areas having headroom less than four (4) feet in height which are not fitted with sash or doors, shall be covered with wire screen. The screen covering such openings shall be of corrosion-resistant metal or other approved material that offers equivalent protection and shall have a maximum mesh of one-eighth (1/8) inch. Eave-type attic ventilators and roof-mounted turbine vents are prohibited.

(h) Insulation: Paper-faced insulation shall be allowed in attics or ventilated spaces only if the paper is not

exposed to the attic open space. Cellulose insulation is required to be fire retardant.

(i) Setback from National Forest Boundary: All buildings on lots which abut a National Forest that were created after March 9, 1988 shall be set back at least thirty (30) feet from the boundary of the San Bernardino National Forest.

(j) Chimneys: Every chimney used in conjunction with any fireplace or any heating appliance in which solid or liquid fuel is used, shall be maintained with a spark arrester. An approved spark arrester shall mean a device constructed of stainless steel, copper or brass, woven galvanized wire mesh, twelve (12) gauge minimum of three-eighths (3/8) inch minimum to one-half (1/2) inch maximum openings, mounted in or over all outside flue openings in a vertical and near vertical position, adequately supported to prevent movement and visible from the ground.

(k) Fire hydrants: Fire hydrants shall be identified by a method specified by the Fire Authority.

(l) Fuel tanks: Fuel tanks (e.g., liquefied petroleum tanks) shall be located at least ten (10) feet away from any structure and in accordance with the Uniform Fire Code, the Table of Projections and the Storage Standards specified by Fire Hazard Performance Standards in Chapters 5 and 9 in Division 7 of this Title. Such tanks shall be secured to the ground.

(m) Water faucets: A minimum of two (2) three quarter (3/4) inch faucets with hose connections each served by a three quarter (3/4) inch waterline and installed prior to any pressure reducing device shall be available per habitable structure separated by at least one-third (1/3) of the perimeter of the structure. Such faucets should be on the side(s) of a structure facing fire hazardous areas whenever possible.

(n) Additional requirements: Dependent upon specific conditions of the site, such as fire flow, building separation, road conditions, slope, vegetation, etc., or combination thereof, the responsible fire authority may require any structures to meet more stringent construction standards as additional mitigation to the fire threat. Such standards include, but are not limited to, full perimeter exterior walls to be constructed to the modified or full one-hour construction standards, sprinklers, soffitted eaves, etc.

Readopted Ordinance 3341 (1989); Amended Ordinance 3427 (1990); Amended Ordinance 3616 (1995), Amended Ordinance 3918 (2004),

85.020230 Building Standards for FS3.

(a) Roof covering: Roof coverings shall be either noncombustible or shall be fire retardant material not composed of organic fiber with a minimum Class A rating, as defined in the California Building Code. The tile shall be tight-fitting and the open ends of high-profile tile shall be capped with non-ignitable material to prevent birds' nests or other combustible material from accumulating. Gutters and downspouts shall be constructed of noncombustible material.

(b) Exterior walls: Exterior walls shall be constructed of noncombustible materials or shall provide the equivalent one-hour fire-resistance-rated construction on the exterior side. Interior side yards shall not be less than five feet. Within the Mountain Planning Area, building separation and side yard setbacks shall be as described in FS1/FS2 areas.

(c) Eaves: Eaves shall be enclosed with a minimum 7/8 inch stucco or equivalent protection.

(d) Exterior glazing: Exterior glazing shall comply with the provisions of the California Building Code and with the following additional requirements:

(1) Exterior windows, window walls and glazed doors, and windows within exterior doors, shall be multi-layered glass panels (dual- or triple-paned), tempered glass, or other assemblies approved by the Building Official.

(2) Vinyl window frame assemblies shall be prohibited, except when they have all of the following characteristics:

(A) Frame and sash are comprised of vinyl material with welded corners;

(B) Metal reinforcement in the interlock area;

(C) Glazed with insulated glass or tempered;

(D) Frame and sash profiles are certified in AAMA Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory); and

(E) Certified and labeled in accordance with American National Standards Institute (ANSI)/AAMA/National Wood Window and Door Association (NWWDA) structural requirements.

(e) Exterior Doors: All exterior doors made of wood or wood portions shall be solid core wood. For exterior doors with inset windows, refer to Subsection 85.0220(d)(1) above.

(f) Address Numbers: All new and existing non-accessory buildings shall have internally illuminated, noncombustible building address numbers legible from the street in accordance with the provisions of the Uniform Fire Code as adopted by the County or the authority having jurisdiction.

(g) Structure openings: Louvers, ventilators, or openings in walls, roofs, attics, and underfloor areas

having headroom less than four (4) feet in height which are not fitted with sash or doors, shall be covered with wire screen. The screen covering such openings shall be of corrosion-resistant metal or other approved material that offers equivalent protection and shall have a maximum mesh of one-eighth (1/8) inch. Eave-type attic ventilators and roof-mounted turbine vents are prohibited. No attic vent shall be placed facing the foothills/wildland.

(h) Insulation: Paper-faced insulation shall be allowed in attics or ventilated spaces only if the paper is not exposed to the attic open space. Cellulose insulation is required to be fire retardant.

(i) Setback from National Forest Boundary: All buildings on lots which abut a National Forest that were created after March 9, 1988 shall be set back at least thirty (30) feet from the boundary of the San Bernardino National Forest.

(j) Chimneys: Every chimney used in conjunction with any fireplace or any heating appliance in which solid or liquid fuel is used, shall be maintained with a spark arrester. An approved spark arrester shall mean a device constructed of stainless steel, copper or brass, woven galvanized wire mesh, twelve (12) gauge minimum of three-eighths (3/8) inch minimum to one-half (1/2) inch maximum openings, mounted in or over all outside flue openings in a vertical and near vertical position, adequately supported to prevent movement and visible from the ground.

(k) Fire hydrants: Fire hydrants shall be identified by a method specified by the Fire Authority.

(l) Fuel tanks: Fuel tanks (e.g., liquefied petroleum tanks) shall be located at least ten (10) feet away from any structure and in accordance with the Uniform Fire Code, the Table of Projections and the Storage Standards specified by Fire Hazard Performance Standards in Chapters 5 and 9 in Division 7 of this Title. Such tanks shall be secured to the ground.

(m) Water faucets: A minimum of two (2) three quarter (3/4) inch faucets with hose connections each served by a three quarter (3/4) inch waterline and installed prior to any pressure reducing device shall be available per habitable structure separated by at least one-third (1/3) of the perimeter of the structure. Such faucets should be on the side(s) of a structure facing fire hazardous areas whenever possible.

(n) Additional requirements: Dependent upon specific conditions of the site, such as fire flow, building separation, road conditions, slope, vegetation, etc., or combination thereof, the responsible fire authority may require any structures to meet more stringent construction standards as additional mitigation to the fire threat. Such standards include, but are not limited to, full perimeter exterior walls to be constructed to the modified or full one-hour construction standards, sprinklers, soffitted eaves, etc.

Readopted Ordinance 3341 (1989), Amended Ordinance 3918 (2004),

85.020235 Project Design Requirements.

The following issues shall be evaluated for any development project that is being processed through the Land Use Services Department:

(a) Access:

(1) All development projects and each phase thereof, except for a development project located exclusively on a cul-de-sac, shall have a minimum of two (2) points of vehicular ingress and egress, designed to County road standards, with a minimum width of twenty-six (26) feet of all weather surface as defined in the Uniform Fire Code, from existing and surrounding streets. One such point of vehicular access may be an emergency access route with an all-weather surface if the Planning Agency makes and justifies all of the following findings:

(A) Two points of non-emergency access are physically infeasible.

(B) Provisions have been made to reasonably ensure that the emergency access will be maintained.

(C) Based on the review and consideration of the responsible fire authority's recommendation, the emergency access route will provide adequate vehicular ingress and egress during emergencies.

(2) There shall be vehicular access, at least twelve (12) feet in width, to within at least ten (10) feet of any static water source including ponds, lakes, swimming pools, reservoirs and water storage tanks. Access shall be either to a plumbed outlet with two and one-half (2 1/2) inch National Hose Thread Fitting, or directly to the source. This requirement shall be waived if the fire authority determines that the water source is sufficiently below the elevation of existing or proposed roads or driveways to make drafting of water from the source through a plumbed outlet infeasible, and that direct vehicular access to the water source would require an impractical extension of a road or driveway.

(b) Water Requirements: All development projects shall provide six (6) inch or larger circulating (loop) water mains as required by the Uniform Fire Code, proper hydrant location and spacing, and have sufficient water storage capacity to provide the minimum fire flow duration requirements [gallons per minute (GPM) for a minimum number of hours or portions thereof] as specified by the minimum system standards established by the fire authority. Circulating (loop) mains are not required for cul-de-sacs and are not required for subdivisions that exclusively take all access from cul-de-sacs. In areas not served by water purveyors, on-site fire flow and water storage requirements will be as specified by the Uniform Fire Code.

(c) Streets: All public or private streets within or bordering a development project shall have noncombustible and reflective street name signs designed to County standards and visible at all street intersections.

(d) Vegetation and Grading: Structures in areas with slopes exceeding thirty percent (30%) and thirty (30) feet in height shall comply with the following:

(1) Where structures are proposed or within two hundred (200) feet of slopes that are greater than thirty percent (30%) prior to grading and where such slopes are at least thirty (30) feet in height, the vegetation on such slopes shall be treated in such a manner that it becomes a fuel modified area. Such fuel modified area shall be maintained for either the entire slope, or one hundred (100) feet, or to the property line, whichever distance is less.

(2) Where grading is utilized which does not conform to the natural slope and the graded area is adjacent to natural ungraded slopes which are greater than thirty percent (30%) and which are greater than thirty (30) feet in height, structures shall be set back at least thirty (30) feet from the edge(s) of the graded area adjacent to such natural ungraded slopes.

(e) Fuel Modification Areas.

(1) A permanent fuel modification area shall be required around development projects or portions thereof that are adjacent or exposed to hazardous fire areas for the purpose of fire protection. In no case shall this area be less than one hundred (100) feet in width as measured from the development perimeter. Where feasible, such areas shall be designated as common open space rather than private open space. The recommended width of the fuel modification area shall be determined based on a Fuel Modification Plan. All final plans shall be reviewed and approved by the responsible fire authority in conjunction with the County Fire Marshall. The plan may be submitted as a preliminary and final plan. A preliminary or final plan shall be submitted concurrently with the development application to the Land Use Services Department for review in conjunction with the project design review. Fuel Modification Plans shall address the following factors, including, but not limited to:

(A) The natural ungraded slope of the land within the project and in the areas adjacent to the project;

(B) Fuel loading;

(C) Access to the project and access directly to the fuel modified area;

(D) The on-site availability of water that can be used for fire fighting purposes;

(E) The continual maintenance of such areas;

(F) The soil erosion and sediment control measures to alleviate permanent scarring and accelerated erosion; and

(G) A list of recommended landscape plant materials that are fire resistant.

(2) When development projects are phased, individual phases may be required to provide temporary fuel modification areas, where the development perimeter of a phase is contiguous to a subsequent phase of a project, which in its undeveloped state is a hazardous fire area. The need for a temporary fuel modification area shall be determined by the responsible fire authority in conjunction with the County Fire Marshall and shall be based upon the same considerations described in Subsection (e)(1) of this section for permanent fuel modification areas.

(f) Erosion and Sediment Control. All development projects, building permits, grading and any other significant land disturbing activity shall install erosion control measures in compliance with the provisions established by the Development Code for such erosion control measures.

(g) Private driveways or access roadways for residential units shall not exceed one hundred fifty (150) feet in length, unless approved by the fire authority pursuant to Section 10.207 of the Uniform Fire Code.

(h) Alternate Measures: Pursuant to Section 85.020240 of this Article and dependent upon site specific conditions, the following design measures or combinations thereof may be substituted for the exterior wall separation requirements for all buildings specified in Subsections 85.020220(b) and 85.020225(b) :

(1) The expansion of fuel modified areas around the perimeter of the development project beyond that required through the provisions of this section or other parts of the County Code.

(2) A substantial transfer of density from steeper slopes, including areas with slopes less than thirty percent (30%) if they exist on-site, to less steep areas within the development project.

(3) Clustering of structures away from the development perimeter and away from fire hazard areas.

(4) Other alternate measures if approved by the Planning Agency pursuant to the provisions of Section 85.020240 of this Article, such as sprinklers.

(i) Every development project application submitted to the Land Use Services Department shall be reviewed by Planning staff through a pre-application conference with the project proponent prior to the acceptance of the application for filing.

(j) A slope analysis shall be filed with all development project land use applications. The slope analysis shall include the following information:

(1) A topographic map of the proposed project area and all adjoining properties within one hundred fifty (150) feet at a scale of not less than one (1) inch to two hundred (200) feet. The contour interval shall not be more than two (2) feet except that the contour interval may be five (5) feet if the general natural ungraded slope is more than ten percent (10%). Contour lines are to be obtained by aerial or field survey, done under the supervision of a licensed Land Surveyor or Registered Engineer.

(2) The natural, ungraded, slope categories to be computed are zero percent (0%) to less than fifteen percent (<15%), fifteen percent (15%) to less than thirty percent (<30%), and thirty percent (30%) or greater. The minimum area (polygon) used for slope calculation shall be five thousand (5,000) square feet;

(3) The area, in acres, shall be tabulated for each category.

(k) A preliminary grading plan shall be filed with all development project land use applications, except that preliminary grading plan requirements may be waived by the Director of Land Use Services if it is determined through the required preapplication conference that such requirements are unnecessary due to site specific soils, topographic or other physical conditions, or due to the specific design of the project. The preliminary grading plan shall include the following:

(1) A topographic map of the proposed project area and all adjoining properties within one hundred fifty (150) feet at a scale of not less than one (1) inch to two hundred (200) feet. The contour interval shall not be more than two (2) feet except that the contour interval may be five (5) feet if the natural ungraded slope is more than ten percent (10%). Contour lines to be obtained by aerial or field survey, done under the supervision of a licensed Land Surveyor or Registered Engineer.

(2) Contours of the finished graded slope shall be shown at intervals similar to that on the topographic base map.

(3) Street grades, slope ratios, flow lines, pad elevations, maximum elevation of top and minimum elevation of toe of finished slopes over five (5) feet in vertical height, the maximum heights of those slopes and approximate total cubic yards of cut and fill shall be shown on the preliminary grading plan.

(4) Compliance with the current edition of the California Building Code, as adopted by the County of San Bernardino, is required.

(5) In the event no such grading is proposed, a statement to that effect shall be placed on the required topographic map described in Subsection 85.020235(j)(1) above and this map shall delineate the boundary of an adequately sized building pad, driveway and septic system (if proposed) for each parcel proposed.

(l) Residential Density: In order to reduce fire hazards, prevent erosion, and to preserve the existing vegetation and visual quality, the density of development for any tentative parcel map or tentative tract map in sloping hillside areas shall be in accordance with the following criteria: One to four (1-4) dwelling units per gross acre on slopes of zero to less than fifteen percent (0-<15%), two (2) dwelling units per gross acre on slopes of fifteen to less than thirty percent (15-<30%), one (1) dwelling unit per three (3) gross acres on slopes of greater than thirty percent (30%) gradient. In the West Valley Foothills Planning Area, zero density is allowed for any portion of a proposed tentative parcel map or tentative tract map on slopes of greater than thirty percent (30%) gradient.

(m) When twenty-five percent (25%) or more of a subdivision project site involving five or more lots is located on natural slopes greater than thirty percent (30%), the subdivision application shall be submitted concurrently with a Planned Development application to evaluate appropriate project design in consideration of topographic limitations of the site. This provision shall not apply if all of the areas on the site with natural ungraded slopes over thirty percent (30%) are permanently restricted from structural development.

(n) Residential density bonuses, if any, shall only be permitted through Planned Developments.

(o) Perimeter Access to Fuel Modified and Fire Hazard Areas: Fire fighting vehicles shall have adequate access into areas between fire hazardous areas or fuel modified areas and the development perimeter, so that a wildland fire can be contained at the development perimeter and prevented from spreading to structures. Adequate access will help prevent structural development from becoming a barrier between fire fighting equipment and personnel and the development perimeter. Development projects shall provide for adequate vehicular access for fire fighting vehicles to the development perimeter of the project along the portion of the development perimeter that is adjacent to either an existing or proposed fuel modified area, or a fire hazard area. Provisions shall be made and shall be required, where necessary, through conditions of approval for the development project for the continual maintenance of the areas intended to provide such access. Perimeter access shall be provided, either through one of the following two measures or through alternate measures pursuant to Section 85.020240 of this Article:

(1) The provision of an existing or proposed road along the development perimeter, or portion thereof that is exposed to a fire hazard or fuel modified area, and which is accessible to fire fighting equipment. Such a road shall be capable of supporting fire fighting equipment, shall be at least twenty (20) feet in width and shall not exceed a grade of fourteen percent (14%). The conditions of approval for the development project shall require provisions to ensure that the roadway will be maintained if it is not within the publicly maintained road system.

(2) Development projects shall provide access ways, at least twelve (12) feet in width, with a grade not to exceed fourteen percent (14%), and capable of supporting fire fighting vehicles, between the development perimeter and proposed or existing streets. Access ways shall be spaced at intervals of no more than an average of three hundred fifty (350) feet along each street. The conditions of approval for the development project shall require specific provisions to ensure that access ways will remain unobstructed and will be maintained. Where feasible, access ways may not be paved and shall be designed so as not to detract from the visual quality of the project.

(p) Lengths of Cul-de-sacs:

(1) Standard: Cul-de-sacs shall not exceed three hundred fifty (350) feet in length, except that they may be extended as allowed by this subsection.

(2) Exception for parcels of less than five (5) acres in area. Cul-de-sacs may exceed three hundred fifty (350) feet in length but shall not exceed six hundred (600) feet in length, if:

(A) Alternate measures are utilized pursuant to the provisions of Section 85.020240 of this Article or;

(B) Based upon consideration of the recommendation of the responsible fire authority, the Planning Agency determines that the cul-de-sac is situated and designed such that the parcels taking access from it are not contiguous to or exposed to either undeveloped fuel modified areas along the development perimeter of the project or to fire hazard areas, and that the extension of the cul-de-sac will not increase the exposure of buildings to wildland fires.

(3) Exception for parcels greater than five (5) acres in area. Cul-de-sacs may exceed six hundred (600) feet in length if all parcels that take access from the cul-de-sac are five (5) acres or greater in area and:

(A) The proposed cul-de-sac is not within or adjacent to areas that are zoned for or subdivided to parcels of five (5) acres or less.

(B) Alternate measures are utilized pursuant to the provisions of Section 85.020240 of this Article.

(4) Alternate Measures. Pursuant to Section 85.020240 of this Article and dependent upon site specific conditions, one of the following measures or combinations thereof may be used to mitigate the effect of creating cul-de-sacs up to six hundred (600) feet in length with parcels less than five (5) acres in area:

(A) Limitation of the total number of dwelling units which have access to the cul-de-sac to no more than fifteen (15), and restriction of further subdivision of parcels and construction of additional independent residential units which have access to the cul-de-sac. Such restrictions shall be imposed through the conditions of approval of the development project.

(B) A continuous perimeter access road at least twenty (20) feet in width is provided along the portion of the cul-de-sac exposed to fire hazard or fuel modified areas such that it is driveable under normal conditions by fire fighting vehicles, provides adequate maneuvering space for such vehicles, and is designed such that at least one point of access to the perimeter access road is taken from roads other than the cul-de-sac in question.

(C) The cul-de-sac road will have a paved width of at least forty (40) feet with posted no parking for its entire length and there is at least one area approximately at the midpoint of the cul-de-sac that serves the same function of a cul-de-sac bulb in allowing fire fighting vehicles adequate room to turn around. This measure may only be utilized if the expansion of the road width will not contribute to slope stability hazards either on or off-site.

(D) Other alternate measures approved by the Planning Agency pursuant to Section 85.020240 of this Article.

Adopted Ordinance 3918 (2004),

85.020240 Alternate Hazard Protection Measures.

(a) Applicability. The following provisions shall apply only to the standards and requirements of Subsections 85.020220(b) and 85.020225(b), regarding building separations, 85.020235(m) regarding perimeter access and 85.020235(n), regarding length of cul-de-sacs. Since these alternative measures apply to the standards and requirements that pertain to these three specific design elements, they are intended to be applied to development projects only and not to individual lot conditions. Therefore, they do not apply to the determination of setbacks for residential construction on individual lots.

(b) Intent. The intent of this subsection is to allow greater design flexibility than would otherwise be permitted in order to provide a more efficient and effective achievement of the purposes of the Fire Safety (FS) Overlay District. Design flexibility is provided by allowing the substitution of alternate measures for the established standards or requirements if it is found that they provide the same or a greater level of protection from wildland fires and other natural hazards, and that they will fulfill the same purpose as the established standard or requirement.

(c) Substitution of Alternative Measures for Standards and Requirements.

(1) If alternative measures are proposed, the responsible fire authority shall determine, with specific consideration of the effect of the proposed alternative measures, whether the proposed development project has adequate provisions for fuel modification and management, including the ongoing maintenance of fuel modified areas.

(2) If the responsible fire authority makes a positive determination pursuant to Subsection 85.020240(c)(1) of this Article, then alternate measures may be substituted for the established standards and requirements if the Planning Agency, with consideration of the recommendation of the responsible fire authority, finds and justifies all of the following:

(A) Alternative measure(s) have been substituted which meet the intent of and which serve the same purpose as the established standard or requirement.

(B) The alternative measure(s) that have been substituted provide the same or a greater level of protection or are as effective as the established standard or requirement.

(C) There are clear and substantial reasons for utilizing the alternative measure(s) because they provide for a more efficient and economic use of the site, or provide for a superior physical design, and are consistent with the intent of the Fire Safety (FS) Overlay District.

Adopted Ordinance 3918 (2004),

Article 3: FLOOD PLAIN SAFETY (FP) OVERLAY DISTRICT

85.020301 Intent.

The Floodplain Safety Overlay District is established to provide greater public safety, promote public health, and minimize public and private economic losses due to flood conditions by establishing regulations for development and construction within flood prone areas.

Readopted Ordinance 3341 (1989)

85.020305 Locational Requirements.

(a) Areas of special flood hazard are identified by the Federal Emergency Management Agency or the Federal Insurance Administration in a scientific and engineering report entitled "Flood Insurance Study" for the County of San Bernardino, dated 1978, which has subsequent updates with accompanying Flood Insurance Rate Maps and Flood Boundary Maps. Subsequent report and map updates that may be published in the future shall further identify additional flood hazard areas. The most current copy of the Flood Insurance Study is on file with the Clerk of the Board in the County Government Center, 385 North Arrowhead Avenue, San Bernardino, County of San Bernardino, State of California.

(b) The Flood Insurance Study establishes the minimum areas in which the Flood Plain Safety Overlay Districts may be located. Additional areas may be added after studies for such areas are prepared by the Flood Control District or other governmental agencies such as the Corp of Engineers.

(c) The Flood Plain Safety Overlay District shall be designated on the San Bernardino County Land Use Plan by the symbols FP1, FP2, or FP3.

Readopted Ordinance 3341 (1989)

85.020310 Boundary Changes.

The following shall apply when an application is made to reduce or change a Flood Plain Safety (FP) Overlay District boundary:

(a) Additional application requirements. An applicant shall submit the following when requesting a change or reduction in a Flood Plain Safety Overlay District boundary where no change has been made in the base flood elevation designated by the applicable FEMA map:

(1) Copy of the recorded deed to the property.

(2) If the property is recorded on a final or parcel map, a copy of the recorded map.

(3) A topographic map indicating present ground elevations, date of fill, and the contours before the fill was placed.

(4) If a structure is involved, a topographic map indicating structure location and ground elevations including the elevations of the lowest floor and the highest adjacent grade to structure.

(5) Data to substantiate the base flood elevation, and hydraulic calculations where base flood elevations have not previously been established.

(6) If fill material is proposed to elevate proposed construction pads one (1) foot above the base elevation, an analysis shall be provided to demonstrate that the fill will not settle and is protected from erosion, scour, or differential settlement as described below:

(A) fill compacted to 95% per ASTM (American Society of Testing Materials) Standard D-698.

(B) fill slopes of granular material no steeper than 1.5 horizontal to 1 vertical-ratio, unless substantiating data is provided.

(C) If flow velocities are greater than five (5) feet per second, slopes shall be armored with stone or rock protection.

(7) Levee Systems Standards. All proposals to recognize levees as providing protection from one hundred (100) year floods shall provide an analysis which certifies that:

(A) Appreciable erosion of the levee embankment will not occur during the base flood.

(B) Seepage during loading conditions associated with base flood will not affect embankment or foundation stability.

(C) There shall be three (3) foot of freeboard provided above the water surface level of the base flood. An additional one (1) foot is necessary within one hundred (100) feet of structures such as bridges. There shall be no settlement that would result in the loss of this freeboard within the minimum standard.

(D) Facilities to eliminate flooding due to interior drainage are adequate. All openings must be provided with closure devices.

(E) The operation and maintenance plan provided is sufficient to insure continuation of the protection afforded by the levee as designed and constructed.

(8) All information, maps and certification required by Subsections (a)(3) through (a)(8) of this Section above, shall be certified by a registered professional engineer or, if appropriate, by a licensed Land Surveyor.

(b) Base Flood Elevation Adjustments.

(1) An applicant may request the Flood Plain Management Administrator to apply to the Federal Emergency Management Administration for an adjustment to the designated Base Flood elevation and/or other designations on the FIRM or Flood Boundary Maps.

(2) The applicant shall be responsible for the payment of all expenses incurred by the County to have the Flood Plain Management Administrator request and substantiate the proposed adjustment to the maps by the required office of the Federal Emergency Management Agency.

(3) All proposals to revise base flood elevations shall comply with the following requirements:

(A) Revised elevations must match old elevation within one half (0.5) foot at points of transition.

(B) Maps shall not be revised when discharges change as a result of the use of an alternative methodology of data for computing flood discharges unless that change is statistically significant as measured by a confidence limits analysis of the new discharge estimates.

(C) In order for an alternative hydraulic or hydrologic methodology to be accepted, any computer program used must be accepted for general use by a governmental agency or notable scientific body, must be well documented including a user's and programmer's manual, and must be available to the general user.

(D) Unless the basis of the request is the use of alternative hydraulic methodology or the requestor can demonstrate that the data of the original hydraulic computer model is unavailable or its use is inappropriate, the analysis shall be made using the same hydraulic computer model used to develop the base flood elevations shown on the effective Flood Insurance Rate Map and updated to show present conditions in the Flood Plain.

(E) Copies of the input and output data from the original and revised hydraulic analysis shall be submitted.

(F) Delineations of Flood Plain boundaries for a flooding source with established base flood elevations must provide both the one hundred (100) and five hundred (500) year flood plain boundaries. For flooding sources without established base flood elevations, only one hundred (100) year flood plain boundaries need be submitted. These boundaries should be shown on a topographic map of suitable scale and contour interval.

(c) Findings. The Planning Agency shall determine in addition to other required findings that the proposed change to a Flood Plain Safety (FP) Overlay District boundary is consistent with the intent of the National Flood Insurance Program regulations and the intent of the Flood Plain Safety (FP) Overlay District provisions.

Readopted Ordinance 3341 (1989)

85.020315 General Provisions.

The following provisions shall apply to all identified areas with potential flood hazards, within the County of San Bernardino:

(a) Compliance. No structure or land use shall hereafter be constructed, located, extended, converted, or altered without full compliance with the provisions of this section and other applicable regulations. Violations of the provisions of this section by failure to comply with any of its requirements (including violation of conditions and safeguards established in connection with conditions) shall be subject to the penalties established by this Title. Nothing herein shall prevent the County from taking such lawful action as is necessary to prevent or remedy any violation.

(b) Abrogation and Greater Restrictions. The provisions of this section are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this section and another section, easement, covenant, or deed restriction conflict or overlap, the more stringent regulations or standards shall govern.

(c) Interpretation. In the interpretation and application of this section all provisions shall be considered as minimum requirements, liberally construed in favor of the governing body and, deemed neither to limit nor repeal any other powers granted under state statutes.

(d) Implementation. The requirements of this section shall be integrated into the processing and review of all land use applications and development permits where specific flood hazard review and flood protection recommendations are made by the County.

Readopted Ordinance 3341 (1989)

85.020320 Review Area Procedures and Construction Standards.

The Flood Plain Safety Overlay District (FP) shall be subdivided into three (3) review areas as follows:

(a) Flood Plain Review Area - (FP1). Areas subject to a one hundred (100) year flood as defined by the Federal Flood Insurance Regulations. In such areas the following shall apply:

(1) New construction and substantial improvement of any structure shall be constructed so that the first habitable floor shall be one (1) foot or more above the base flood elevation, when the FEMA map base flood elevations are shown, and will not result in any significant increase in flood levels during the base flood discharge. When the base flood elevations are not shown, new construction and substantial improvement of any residential structure shall be constructed so that the first habitable floor shall be two (2) feet or more above the highest adjacent grade.

(2) Review Procedures. Projects proposed in this area shall be subject to a Flood Hazard Development Review. This review shall ensure that the proposed project complies with this Title regarding flood protection measures and will require the submittal of an Elevation Certificate completed by a land surveyor, engineer, or architect who is authorized by State or local law to certify elevation information.

(3) Development Restriction. In areas where no regulatory floodway has been designated, no new construction, substantial improvement or other development (including fill) shall be permitted within any areas designated by FEMA as A1 through A30, inclusive, or AE on the FIRM or Flood Boundary Maps, unless it is demonstrated that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

(b) Flood Plain Review Area 2 (FP2). Areas between limits of the one hundred (100) year flood and subject to a five hundred (500) year flood; and certain areas subject to one hundred (100) year flooding with an average depth of less than one (1) foot or where the contributing drainage areas are less than one (1) square mile; or areas protected by levees from the base flood. In such areas the following shall apply:

(1) New construction and substantial improvement of any structure shall be so constructed that the first habitable floor shall be one (1) foot above the base flood elevation when the FEMA map base flood elevations are shown, and above the highest adjacent grade when the base flood elevations are not shown.

(2) Review Procedure - Projects proposed in this area shall be subject a Flood Hazard Development Review. This review shall ensure that the proposed project complies with this Title regarding flood protection measures and will require the submittal of an Elevation Certificate completed by a land surveyor, engineer, or architect who is authorized by State or local law to certify elevation information.

(c) Flood Plain Review Area 3 (FP3). Areas of shallow flooding with undetermined, but possible, flood hazards as determined by the County, the Flood Control District, or other governmental agency.

(1) Field Investigation Required. Before a building permit can be issued on any affected lot, a field investigation shall be made of the lot to determine if the proposed construction will have any substantial detrimental effect on the drainage way. An applicant for the building permit on an affected lot or parcel shall first apply for the required field investigation and shall pay the appropriate fee. The following shall be included in the application for field investigation:

(A) A corner record, record of survey, parcel map, final map, or a past survey that is approved by the County Surveyor as being in conformance with the Land Surveyors Act shall be submitted.

(B) A plot plan showing the proposed structures and grading by size, location and orientation.

(2) Prior to the inspection of the site by the Building Inspector, the applicant shall locate the proposed construction on the site by the use of stakes, strings, line marks or similar method(s).

(3) The applicant shall then meet with the inspector, on the site if necessary, to discuss the final building location and any mitigating measures required by the Building Official to maintain the natural drainage way in its existing condition.

(4) The final building plans which are submitted for approval shall show the approved location and mitigating measures.

Readopted Ordinance 3341 (1989); Amended Ordinance 3612 (1995)

85.020325 Development Standards.

(a) Standards Of Construction. The following provisions shall apply in all areas of special flood hazards:

(1) Anchoring. All new construction and substantial improvements shall be anchored to the foundation to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. If a structure is elevated on fill as specified in Subsections 85.020325(a)(2)(E) and 85.020325(a)(3)(A) of this section, the anchoring requirement shall be satisfied. Other alternative anchoring techniques which are effective may be considered.

(2) Construction Materials and Methods.

(A) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage. This would include but not be limited to water resistant lumber, floor coverings, adhesives, paints, masonry construction and finishes, water proof electrical systems, and mechanical footings, or other acceptable materials measures.

(B) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage. This would include but not be limited to elevating the structure, parallel alignment of structure, with water flow, increase the structural designs to withstand hydrologic and hydrolographic sources, and increase depth of footings.

(C) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(D) Require that within the Flood Plain Safety Overlay District, adequate drainage paths be provided around structures on slopes to guide flood waters around and away from proposed structures.

(E) If fill is placed to elevate pads one (1) foot above base elevation, it must be demonstrated that fill will not settle and is protected from erosion, scour, or differential settlement as described below:

(I) Fill compacted to 95% per ASTM (American Society of Testing Materials) Standard D-698.

(II) Fill slopes of granular material no steeper than one half (1.5) feet horizontal to one (1) foot vertical ratio unless substantiating data for steeper slopes and such slopes are approved by the County.

(III) If flow velocities are greater than five (5) feet per second, fill slopes shall be armored with stone or rock slope protection.

Elevation and Floodproofing.

(A) New construction and substantial improvement of any residential structure shall have the lowest habitable floor, elevated to one (1) foot above base flood elevation in the Flood Plain Review Area 1 and one (1) foot above ground level in Flood Plain Review Area 2. Upon the completion of the structure, the elevation of the lowest habitable floor, including basement, shall be certified by a registered professional engineer or licensed land surveyor, and verified by the County Building Official to be properly elevated above the floodplain elevation at the time of certification. Such certification or verification shall be provided to the Flood Plain Management Administrator. In instances when the base flood elevation data has not been provided on the Flood Insurance Rate Map (FIRM), the provisions of Subsection 82.0601(b) of the County Development Code shall apply. The administrator may further exempt proposed single family residences from this requirement when the base flood elevation data has not been provided on the FIRM.

(B) New construction and substantial improvement of any residential structure shall have the lowest habitable floor, elevated above the highest adjacent grade at least one (1) foot higher than the depth number specified in feet on the FIRM, or at least two (2) feet if no depth number is specified. Upon the completion of the structure, the elevation of the lowest habitable floor shall be certified by a registered professional engineer or licensed land surveyor, or verified by the County Building Official to be properly elevated above the flood plain elevation as derived from the adopted FEMA map, applicable to subject area at the time of certification. Such certification or verification shall be provided to the Flood Plain Management Administrator.

(C) Nonresidential construction shall be elevated in conformance with Subsection (a)(3) of this section or together with attendant utility & sanitary facilities and shall:

(I) Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

(II) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(III) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Flood Plain Management Administrator.

(D) All new construction and substantial improvements to existing structures, shall be required to fully enclose structural areas below the lowest floor that are subject to flooding and such areas shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either:

(I) Be certified by a registered professional engineer or an architect; or

(II) Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters; or

(III) Be verified by the Flood Plain Administrator or his designee as complying with floodproofing standards approved by the Federal Insurance Administration.

(b) Utility Standards.

(1) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

(2) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(3) All public utilities and facilities such as electrical, telephone, cable TV, gas etc., shall utilize floodproofing measures in their location and construction to minimize flood damage.

(c) Land Use Application Review Requirements.

(1) All preliminary proposals shall identify the flood hazard area and the elevation of the base flood.

(2) All final plans shall provide the elevation of proposed structure(s) and pads above the flood plain elevation as derived from the FEMA map adopted at the time of certification. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or licensed land surveyor and shall be submitted to the Flood Plain Management Administrator. The entire site need not be elevated; only the building pads need be elevated and other means of conducting storm flows through the site shall be provided.

(3) All proposals shall be consistent with the need to minimize flood damage.

(4) All proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(5) All proposals shall provide adequate drainage to reduce exposure to flood hazards and not deflect flood flows onto other properties.

(d) Manufactured Homes Standards. All new and replacement manufactured homes and additions to manufactured homes shall be subject to all the provisions of Section 85.020325 of this Article.

(1) Nonresidential construction shall be elevated in conformance with Subsection 85.020325(a)(3) of this section.

(2) All manufactured homes shall be securely anchored to a permanent foundation system to resist flotation, collapse or lateral movement. Methods of anchoring shall include, but not be limited to, the use of over-the-top or frame ties to ground anchors.

(e) Floodway Standards. Floodway areas are located within a special flood hazard areas and are established as specified in Subsections 85.020305 (a) and (b) of this Article. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Encroachments, including fill, new construction, substantial improvements, stockpiling, and other development are prohibited unless certification by a registered professional engineer or architect is provided, demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) If Subsection 85.020325(a)(1) of this Article is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Section 85.020325 of this Article.

Readopted Ordinance 3341 (1989)

85.020330 Exceptions.

The following structures and land uses are exempt from the requirements and standards established by this section:

(a) Existing legally constructed structures for human habitation within the Flood Plain Safety Overlay District shall be considered legal nonconforming uses and subject to the privileges and regulations thereof.

(b) Structures for human habitation for which there was a valid building permit in effect at the time this section became effective.

(c) The reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or a State Inventory of Historic Places.

(d) Replacement of utilities, including septic systems, in compliance with health and safety codes shall be exempt from the flood elevation requirements of this Code and shall otherwise be subject to the legal non-conforming use provisions of this Code.

Readopted Ordinance 3341 (1989)

85.020335 Modifications.

(a) In the public interest, the Building Official may, without notice or public hearing, approve, conditionally approve, deny or refer to the Planning Commission requests to modify the requirements of the Flood Plain Safety (FP) Overlay District.

(b) Procedure. Written application (either Major Variance or Minor Variance) for such modifications shall be submitted to the Office of Planning or the Office of Building and Safety, upon the forms provided by the County for this purpose.

(c) A modification to the standards imposed by this section shall be allowed subject to such lawful conditions as will secure substantial protection for the public health, safety and general welfare and provided that all of the following be found and justified as being true:

(1) The modification, if within any designated regulatory floodway, will not result in any significant increase in flood levels during the base flood discharge.

(2) The modification is for new construction or substantial improvement on lots contiguous to and surrounded by lots with existing structures constructed below the base flood level.

(3) The granting of the modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud or victimization of the public or conflict with existing laws or ordinances.

(4) The modification is the minimum necessary, considering the flood hazard, to afford relief and is consistent with the objectives of sound flood plain management.

Readopted Ordinance 3341 (1989); Amended Ordinance 3374 (1990)

Article 4: GEOLOGIC HAZARD (GH) OVERLAY DISTRICT

85.020401 Intent.

The Geologic Hazard (GH) Overlay District is created to provide greater public safety by establishing investigation requirements for areas that are subject to potential geologic problems such as active faulting, landsliding, debris flow, rockfall and liquefaction.

Readopted Ordinance 3341 (1989); Amended Ordinance 3864 (2002)

85.020405 Locational Requirements.

(a) The Geologic Hazard Overlay District shall be designated in areas that are adjacent to active earthquake fault traces. This overlay district shall adopt the boundaries of the Alquist-Priolo Earthquake Fault Zoning Act.

(b) The Geologic Hazard Overlay District shall be designated in areas where landslides, debris flows, rockfall or other slope instabilities occur.

(c) The Geologic Hazard Overlay District shall be designated in areas where liquefaction of the soil is associated with earthquake activity.

(d) The Geologic Hazard Overlay District shall be designated by the symbol (GH) on the San Bernardino County Official Land Use Plan.

Readopted Ordinance 3341 (1989); Amended Ordinance 3864 (2002)

85.020410 Geologic Reports.

(a) A detailed geologic study prepared by a California Registered Geologist shall be submitted with all land use applications and development permits proposed within the Geologic Hazard Overlay District, that would lead to the construction of roads or structures or the subdivision of land.

(b) In that portion of the Geologic Hazard Overlay District where faulting is a concern, the geologic report shall confirm the presence or absence of active faults and, if applicable, shall establish appropriate construction setbacks from active faulting.

(c) In that portion of the Geologic Hazard Overlay District where slope stability is a concern, the geologic report shall evaluate landslides and other slope instabilities that could affect the project and, if applicable, shall include recommendations for mitigation.

(d) In that portion of the Geologic Hazard Overlay District where liquefaction is a concern, the geologic report shall evaluate the potential for liquefaction based upon anticipated ground shaking, historic groundwater levels and character of the alluvial materials. If the investigation determines that a potential for liquefaction exists, a geotechnical investigation may be required.

(e) Exemptions to the requirement for a geologic study include:

(1) One single-family wood or steel frame dwelling not exceeding two (2) stories.

(2) Single-family wood frame or steel dwellings located within a subdivision of land for which a geologic report was prepared and approved.

(3) A non-residential accessory use that is not physically connected to the principal structure.

(4) The alterations or additions to any structure where the value or area does not exceed fifty percent (50%) of the structure.

Readopted Ordinance 3341 (1989); Amended Ordinance 3864 (2002)

85.020415 Development Standards.

When a land use is proposed within a Geologic Hazard Overlay District, the following standards shall apply:

(a) Development of all structures used for human occupancy, shall take place fifty (50) feet or farther from any active earthquake fault traces. Lesser setbacks may be applicable in certain situations as determined by an appropriate geologic investigation and approved by the County Geologist or other engineering geologist designated by the Building Official.

(b) Development of all structures used for critical facilities shall take place one hundred-fifty (150) feet or farther from any active earthquake fault trace as indicated within the County General Plan. Critical facilities shall include dams, reservoirs, fuel storage facilities, power plants, nuclear reactors, police and fire stations, schools, hospitals, rest homes, nursing homes and emergency communication facilities.

(c) Utility lines and streets shall not be placed within the construction setback area of a hazardous fault except for crossing which can be made perpendicular to the fault trace or as recommended by the project geologist and approved by the County Geologist or individual designated by the Building Official.

(d) Use of development restricted areas as recreation and common open spaces is encouraged.

Readopted Ordinance 3341 (1989); Amended Ordinance 3427 (1990); Amended Ordinance 3864 (2002)

Article 5: NOISE HAZARD (NH) OVERLAY DISTRICT

85.020501 Intent.

The Noise Hazard (NH) Overlay District is created to provide greater public safety by establishing land use review procedures and requirements for land uses in areas with identified high noise levels.

Readopted Ordinance 3341 (1989)

85.020505 Locational Requirements.

(a) The Noise Hazard Overlay should be applied to those areas where the Average Day-Night Sound Level (Ldn) is sixty-five (65) decibels, 65dBA or greater, except in the Chino Hills Specific Plan area where it shall be applied to areas with Ldn of sixty (60) decibels or greater, 60 dBA.

(b) The Noise Hazard Overlay District shall be designated by the symbol (NH) on the San Bernardino County Official Land use Plan.

Readopted Ordinance 3341 (1989)

85.020510 Development Standards.

When a land use application or development permit is proposed within the Noise Hazard Overlay District, the following standards shall apply with respect to residential uses:

(a) Noise levels shall be identified. An acoustical report shall be performed to identify noise impact and any recommendation for noise attenuation, or other mitigation measures shall be incorporated into the design standards or conditions of approval as applicable.

(b) Interior noise levels in all one-family and multi-family residences and educational institutions shall not exceed forty-five (45) dBA Ldn emanating from sources outside of the residential building.

(c) Exterior noise levels in all one-family residential land use areas and multi-family residential land use areas should not exceed sixty-five (65) dBA Ldn. Exterior noise levels shall not exceed seventy (70) dBA Ldn for any residential use areas.

(d) Ability to mitigate exterior noises to the levels of sixty-five (65) dBA Ldn and seventy (70) dBA Ldn shall be considered by the reviewing authority when determining the actual Ldn level with which the land uses must comply.

(e) In areas where noise exceeds the noise standard, measures shall be taken to mitigate noise levels. An acoustical report identifying these mitigation measures shall be required and reviewed by Environmental Health Services Department prior to issuance of any required development permits or approval of land use applications.

(f) All other structures shall be sound attenuated against the combined input of all present and projected exterior noise to not exceed the following criteria:

Typical Uses	12-Hour Equivalent Sound Level(Interior) dBA Ldn
Educational, Institutions, Libraries, Churches, etc.	45 dBA
General Office, Reception, etc.	50 dBA
Retail Stores, Restaurants, etc.	55 dBA
Other Areas for Manufacturing, Assembly, Test, Warehousing, etc.	65 dBA

In addition, the average of the maximum levels on the loudest of intrusive sounds occurring during a twenty-four (24)-hour period shall not exceed sixty-five (65) dBA interior.

Readopted Ordinance 3341 (1989)

Article 6: HAZARDOUS WASTE (HW) OVERLAY DISTRICT

85.020601 Intent.

The Hazardous Waste (HW) Overlay District is created to:

(a) Ensure that hazardous waste facilities are sited in areas that protect public health, safety, welfare, and the environment;

(b) Buffer hazardous waste facilities so that incompatible uses cannot be permitted in the future;

(c) Identify permitted uses within the overlay; and

(d) Outline the permit review procedures.

Adopted Ordinance 3446 (1991)

85.020605 Locational Requirements.

(a) The Hazardous Waste Overlay District shall be applied to those areas where a Hazardous Waste Facility is being approved concurrently.

(b) The Hazardous Waste Overlay District shall be designated by the symbol (HW) on the San Bernardino County Official Land Use Plan.

(c) The Hazardous Waste Overlay District may most appropriately be located in the following land use districts:

(1) Resource Conservation (RC) for land disposal and incineration facilities. Incineration facilities shall not, however, be located in areas where emissions from the facility could directly impact food crops or livestock.

(2) Regional Industrial (IR) for treatment, incineration, recycling, storage and transfer facilities. Incineration facilities shall not, however, be located in areas where emissions from the facility could directly impact food crops or livestock.

(d) Siting Criteria for Hazardous Waste Facilities: Refer to Policies HW-5 and HW-7 in the General Plan or to Table 5-2 of Chapter 5 of the San Bernardino County Hazardous Waste Management Plan.

(e) A Risk Assessment evaluating a proposal for a Hazardous Waste Facility shall determine the appropriate location for the overlay district for the facility.

Adopted Ordinance 3446 (1991)

85.020610 Development Standards.

(a) Review procedures include State and County processes. The types of applications required for local evaluation of a specified hazardous waste facility proposal include both discretionary and ministerial permits. The required San Bernardino County permits or processes include:

(1) A General Plan Amendment to apply the Hazardous Waste (HW) Overlay District to the proposed site and respective buffer.

(2) A Conditional Use Permit. Refer to Article 1 of Chapter 3 of Division 3 of this Title for the procedures for this permit.

(3) A Special Use Permit. This permit is issued by the San Bernardino County Fire Department and is required as a condition of approval of the Conditional Use Permit.

(4) Ministerial Permits from the San Bernardino County Department of Building and Safety for building, grading, flood control, etc.

For a complete discussion of the local application review process, refer to Section 5.3.3 and Table 5-4 of Chapter 5 of the San Bernardino County Hazardous Waste Management Plan.

(b) The following list of use classifications have been determined to be compatible with a hazardous waste facility and are permitted within a HW Overlay District.

(1) Repair Services I, II & III.
(2) Open Lot Services I & II.
(3) Manufacturing Operations I & II.
(4) Wholesale/Warehouse Services I & II.
(5) Contract/Construction Services.
(6) Transportation Services I & II.
(7) Salvage Services.

(c) The following uses are specifically prohibited from the HW Overlay District:

(1) Residential uses of any type.
(2) Agricultural uses of any type.
(3) Facilities with a high concentration of people/immobile population such as schools, hospitals, auditoriums, amphitheaters, jails, etc.

Adopted Ordinance 3446 (1991); Amended Ordinance 3657 (1996)